

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended): A connecting structure which connects an auxiliary machinery to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, said connecting structure comprising:

a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;

a discrete connection terminal having a proximal end which ~~receives said flat cable and~~ connects to said circuitry pattern on said board and a distal end which connects to at least one conductor among said conductors of said flat cable, ~~extending in a first direction therebetween, and comprising opposite ends in the first direction which terminate within the auxiliary machinery and are covered by the auxiliary machinery in the first direction;~~

a connecting portion disposed on an outer surface of said housing which connects said discrete connection terminal and at least one conductor of said flat cable; and

a molded part for sealing said connecting portion,

wherein a first portion of said flat cable which extends from said connecting portion is provided on and extends along an outer surface of said auxiliary machinery.

2. (Previously presented): A connecting structure according to claim 1, wherein:
said auxiliary machinery is coupled to an end of said flat cable at a first end portion of said housing of said auxiliary machinery;
said at least one conductor is connected to a proximal end portion of said connection terminal along the first direction, which is perpendicular to axes of the conductors; and
said flat cable is installed to extend along the outer surface of said housing over a specific distance from said first end to a second portion of said housing, and
at the second portion of said housing, the axes of the conductors bend in a direction away from the outer surface of said housing.

3. (Currently amended): A waterproofing structure for an auxiliary machinery that is directly connected to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, and said flat cable is provided on and extends along an outer surface of said auxiliary machinery, said waterproofing structure comprising:

a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;

a discrete connection terminal having a proximal end which ~~receives said flat cable and~~ connects to said circuitry pattern on said board and a distal end which connects to at least one conductor among said conductors of said flat cable, ~~extending in a first direction therebetween,~~

~~and comprising opposite ends in the first direction which terminate within the auxiliary machinery and are covered by the auxiliary machinery in the first direction;~~

an exposed a connecting portion disposed on an outer surface of said housing which connects said discrete connection terminal and at least one conductor of said flat cable; and
a molded part for sealing said connecting portion.

4. (Currently amended): A mounting structure for auxiliary machinery that is directly coupled to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, and said flat cable is provided on and extends along an outer surface of said auxiliary machinery; and where a receiving member is provided with a mounting hole for mounting the auxiliary machinery, said mounting structure comprising:

a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a connection end engaged in the mounting hole and a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;

a discrete connection terminal having a proximal end which ~~receives said flat cable and~~ connects to said circuitry pattern on said board and a distal end which connects to at least one conductor among said conductors of said flat cable, ~~extending in a first direction therebetween, and comprising opposite ends in the first direction which terminate within the auxiliary machinery and are covered by the auxiliary machinery in the first direction;~~

~~an exposed~~ a connecting portion disposed on an outer surface of said housing which connects said discrete connection terminal and at least one conductor of said flat cable;

a retainer attachable to the connection end of said housing and to the mounting hole of said receiving member;

a molded part for sealing said connecting portion, and wherein said auxiliary machinery is mounted to said receiving member by attaching said retainer in said mounting hole from one side of said receiving member, and attaching said housing to said retainer from the other side of said receiving member.

5. (Previously presented): A mounting structure for auxiliary machinery according to claim 4, wherein said retainer comprises:

a collar for interlocking with a periphery of said mounting hole from a side opposed to a side where the housing is attached;

a projecting part for interlocking with a periphery of said mounting hole from the side where said housing is attached; and

an interlocking projection that interlocks with said housing.

6. (Previously presented): A mounting structure for auxiliary machinery according to claim 4, wherein said retainer comprises:

a collar for interlocking with a periphery of said mounting hole from a side opposed to a side where said housing is attached; and

an interlocking projection that interlocks with said housing,

wherein said auxiliary machinery is mounted and firmly fixed to said receiving member in a state such that peripheries of either open side of said mounting hole are held between said collar and a distal end of said housing after it has been mounted in said retainer.

7. (Previously presented): A connecting structure according to claim 1, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

8. (Previously presented): A waterproofing structure according to claim 3, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

9. (Previously presented): A mounting structure according to claim 5, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

10. (Previously presented): A connecting structure according to claim 1, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

11. (Previously presented): A waterproofing structure according to claim 3, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

12. (Previously presented): A mounting structure according to claim 5, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

13. (Previously presented): A connecting structure according to claim 1, wherein said housing comprises:

a large first portion that contains said board; and
a smaller second portion extending orthogonally from the large first portion, and
wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

14. (Previously presented): A waterproofing structure according to claim 3, wherein said housing comprises:

a large first portion that contains said board; and
a smaller second portion extending orthogonally from the large first portion, and
wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

15. (Previously presented): A mounting structure for auxiliary machinery according to claim 5, wherein said housing comprises:

a large first portion that contains said board; and
a smaller second portion extending orthogonally from the large first portion, and
wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

16. (Previously presented): A connecting structure according to claim 1, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

17. (Previously presented): A waterproofing structure according to claim 3, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

18. (Previously presented): A mounting structure according to claim 5, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

19. (Previously presented): A connecting structure according to claim 1, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.

20. (Previously presented): A waterproofing structure according to claim 3, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.

21. (Previously presented): A mounting structure according to claim 5, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.